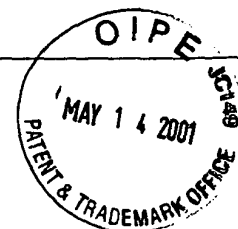


SEQUENCE LISTING



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MAY 16 2001

TECH CENTER 1600/2900

<110> Schneider, Thomas D.
Hengen, Paul N.
The Government of the United States of America
as represented by The Secretary of the
Department of Health and Human Services

<120> Molecular Computing Elements: Gates and Flip-Flops

<130> 015280-332100US

<140> US 09/601,561

<141> 2000-12-15

<150> US 60/075,468

<151> 1998-02-20

<150> WO PCT/US99/03469

<151> 1999-02-17

<160> 19

<170> PatentIn Ver. 2.1

<210> 1

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:consensus
sequence of early model of Factor for Inversion
Stimulation (Fis) binding site

<400> 1

ttgstcaaaa tttgascaaa

20

<210> 2

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:paired Factor
for Inversion Stimulation (Fis) binding sites with
11 bp spacing; overlap 11

<400> 2

tattctttgc tcaaaatttg atcaaatttt gagcaaagaa ta

42

<210> 3

<211> 38

<212> DNA

<213> Artificial Sequence

Q6

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<220>
<223> Description of Artificial Sequence:paired Factor
for Inversion Stimulation (Fis) binding sites with
7 bp spacing; overlap 7

<400> 3
aggcttttgc tcaaagtta aactttgagc aaaagcct

38

<210> 4
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:sequence logo
for Factor for Inversion Stimulation (Fis) binding
site

<400> 4
gctcaaaatt tgatc

15

<210> 5
<211> 58
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Factor for
Inversion Stimulation (Fis) binding sites
separated by 23 bp; separated 23

<400> 5
ggaattcttt gctcaaaatt tgatcaggat cctgatcaaa ttttgagcaa agaattcc

58

<210> 6
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:18.1 bit Fis
site

<400> 6
tttgctcaaa atttgatcaa a

21

<210> 7
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:18.1 bit Fis
site

<400> 7
tttgatcaaa ttttgagcaa a

21

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<210> 8
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:12.7 bit Fis
site

<400> 8
tttgctcaaa gtttaaactt t 21

<210> 9
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:12.7 bit Fis
site

Ab
<400> 9
aaagtttaaa ctttgagcaa a 21

<210> 10
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:15.0 bit Fis
site

<400> 10
tttgctcaaa atttgatcag g 21

<210> 11
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:15.0 bit Fis
site

<400> 11
cctgatcaaa ttttgagcaa a 21

<210> 12
<211> 46
<212> DNA
<213> Escherichia coli

<220>
<223> origin of replication (oriC)

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<400> 12
gttatacacactcaaaaac tgaacaacag ttgttctttg gataac

46

<210> 13
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Fis site
separated by 11 bases; 9.1 bit Fis site

<400> 13
gaacaacagt tggtc

15

<210> 14
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Fis site
separated by 11 bases; 8.4 bit Fis site

<400> 14
actcaaaaac tgaac

15

<210> 15
<211> 113
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:synthesized
single very long nucleic acid with hairpin loop
DNA

<400> 15
aacgggatcc actcaaaaac tgaacaacag ttgttcgaat tcctcgagcg atcggcgaag 60
ccgatcgctc gaggaattcg aacaactgtt gtccagtttt tgagtggatc ccg 113

<210> 16
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:8.4 bit Fis
site

<400> 16
tccactcaaa aactgaacaa c

21

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<210> 17
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:10.0 bit Fis
site

<400> 17
actgaacaac agttgttcga a 21

<210> 18
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
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site

<400> 18
ttcgaacaac tgttgttcag t 21

<210> 19
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:8.4 bit Fis
site

<400> 19
gttggttcagt ttttgagtgg a 21

Ab
conc

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